WHAT IS CLAIMED IS:

1. A method of making an absorbent cellulosic web resistant to moisture penetration comprising:

(a) wetting at least one surface of the web with an aqueous dispersion including a wax and an emulsifier; and

(b) heating the web above the melting temperature of the wax to fuse the wax of the dispersion and to provide a hydrophobic surface on the web, the wax being disposed in the web so that the open interstitial microstructure between fibers in the web is substantially preserved and the web has a laterally hydrophobic surface which exhibits a moisture penetration delay of at least about 2 seconds as well as a contact angle with water of at least 50 degrees at one minute of contact time with the web.

2. The method according to Claim 1, wherein the laterally hydrophobic surface of the web exhibits a moisture penetration delay of from about 3 to about 40 seconds.

3. The method according to Claim 2, wherein the laterally hydrophobic surface of the web exhibits a moisture penetration delay of at least about 5 seconds.

4. The method according to Claim 3, wherein the laterally hydrophobic surface of the web exhibits a moisture penetration delay of at least about 10 seconds.

5. The method according to Claim 1, wherein the laterally hydrophobic surface of the web exhibits contact angle with water of at least about 70 degrees at one minute of contact time with the web.

6. The method according to Claim 1, wherein the laterally hydrophobic surface of the web exhibits contact angle with water of at least about 85 degrees at one minute of contact time with the web.

7. The method according to Claim 1, wherein the web is repulpable.

8. The method according to Claim 1, wherein the web is dispersible.

9. The method according to Claim 1, wherein the wax comprises a wax selected from the group consisting of microcrystalline waxes, carnauba waxes, polyolefin waxes such as polyethylene waxes, polypropylene waxes and polybutene waxes, polyurethane waxes, montan waxes, paraffin waxes, Fischer-Tropsch waxes and mixtures thereof.

10. The method according to Claim 9, wherein the wax is a microcrystalline wax and the wax dispersion includes an emulsifier selected from the group consisting of anionic emulsifiers and non-ionic emulsifiers.

11. A method of making a multi-ply absorbent cellulosic product comprising:

(a) wetting at least one surface of a web with an aqueous dispersion including a wax and an emulsifier;

(b) heating the web above the melting temperature of the wax to fuse the wax of the dispersion and to provide a hydrophobic surface on the web, the wax being disposed in the web so that the open interstitial microstructure between fibers in the web is substantially preserved and the web has a laterally hydrophobic surface which exhibits a moisture penetration delay of at least about 2 seconds as well as a

contact angle with water of at least 50 degrees at one minute of contact time with the web; and

(c) plying the web with at least one additional ply.

12. The method according to Claim 11, wherein the hydrophobic surface of the treated web is internally disposed in the product.

13. The method according to Claim 11, wherein the plies are glue-bonded.

14. The method according to Claim 11, wherein the additional ply is a wax treated cellulosic ply exhibiting resistance to moisture penetration wherein the additional wax treated cellulosic ply comprises an absorbent web of cellulosic fiber and the fused residue of an aqueous wax dispersion applied to one side thereof, and has a laterally hydrophobic surface and a relatively hydrophilic surface such that the contact angle of the laterally hydrophobic surface with water is at least about 5 degrees greater than the contact angle of the relatively hydrophilic surface with water and wherein the hydrophobic surface of the additional treated ply exhibits a moisture penetration delay of from about 3 to about 40 seconds.

15. The method according to Claim 14, wherein the hydrophobic surfaces of the treated plies are internally disposed in the multi-ply product.

16. The method according to Claim 15, wherein the hydrophobic surfaces of the treated plies are in contact with one another.

17. The method according to Claim 16, wherein the product is a napkin.

18. A method of making a tissue product comprising:

(a) wetting at least one surface of a web with an aqueous dispersion including a wax and an emulsifier;

(b) heating the web above the melting temperature of the wax to fuse the wax of the dispersion and to provide a hydrophobic surface on the web,

wherein the wax is disposed in the web so that the open interstitial microstructure between fibers in the web is substantially preserved and the web has a laterally hydrophobic surface which exhibits a moisture penetration delay of at least about 2 seconds as well as a contact angle with water of at least 50 degrees at one minute of contact time with the web; and

(c) incorporating the web into a tissue product having a basis weight of from about 15 to about 30 lbs per 3000 square foot ream, wherein the tissue product exhibits liquid penetration barrier properties such that less than about 20 percent of liquid sorbed from 0.1 ml of liquid propelled to one surface of the tissue in a sneeze simulation test will penetrate to the surface of the tissue product opposite to the impact of the liquid.

19. The method according to Claim 18, wherein the tissue product is a two-ply tissue product.

20. The method according to Claim 19, wherein the liquid sorbed from liquid propelled to one surface of the tissue product in a sneeze simulation test will exhibit a maximum concentration at a central portion of the tissue product,

such that the maximum concentration is at least about 1.25 times the concentration of the liquid sorbed at the surface portion proximate the vicinity of impact and wherein the maximum is at least about 2.5 times the concentration of liquid sorbed at the surface portion distal to impact.